

## NEW ORLEANS NOSTALGIA

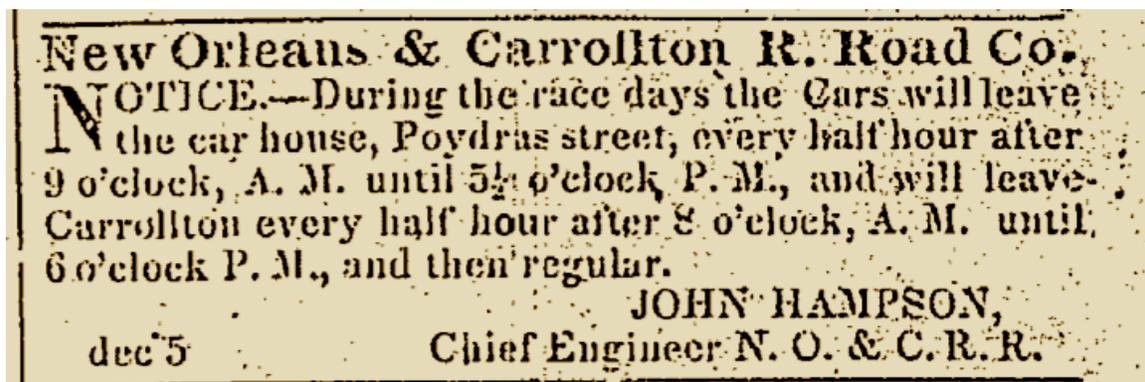
*Remembering New Orleans History, Culture and Traditions*

*By Ned Hémard*

### Creative Crescent City

New Orleans has much in common with Venice, Italy: Carnival, canals and close proximity to the forces of nature. But did you know that the modern design for Venetian blinds originated in the Crescent City?

United States patent No. 2,223 was awarded on August 21, 1841, to John Hampson on a "manner of retaining in any desired position the slats of Venetian Blinds." This adjustment design is still the most employed method in stringing Venetian blinds in use today. Hampson was not just some eccentric inventor. He was the Mayor of Carrollton before it was annexed by the City of New Orleans. The 1851 City Directory lists that as his occupation, as well as chief engineer for the N. O. & C. R. R. (the New Orleans and Carrollton Railroad, or present day St. Charles Avenue streetcar line). By 1855, Carrollton would have a stately City Hall designed by noted architect, Henry Howard, later home to a number of public schools (such as McDonogh 23, Ben Franklin and Lusher). It is located on Carrollton Avenue between Maple and Hampson, named for this little-known inventor and mayor.

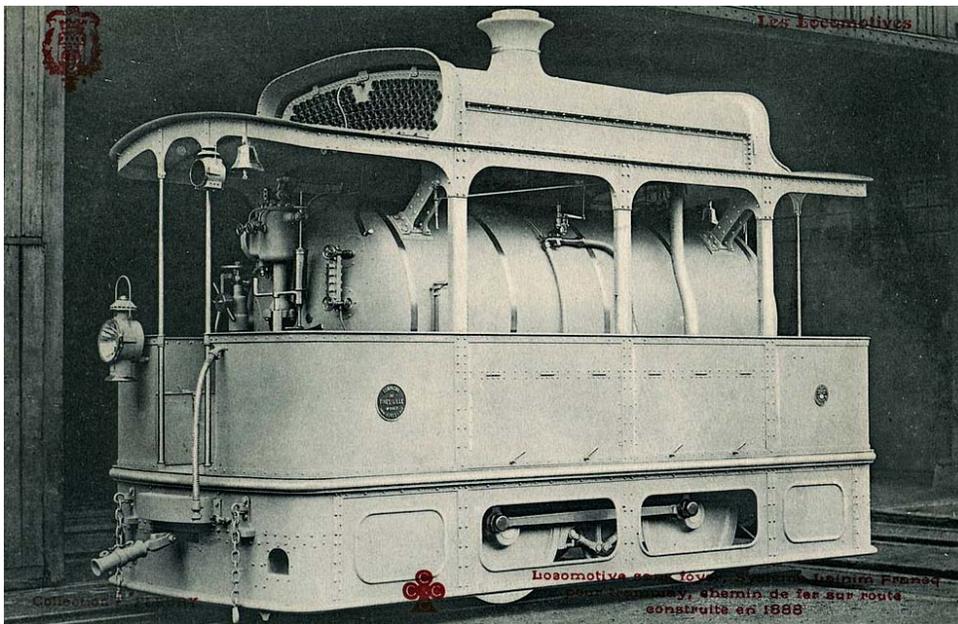


*1838 notice in the Picayune*

New Orleans dentist Dr. Levi Spear Parmly is credited with inventing the first type of dental floss, used to remove food and plaque from between teeth. He recommended that people should clean their teeth

with waxed silken thread according to his 200-page booklet, *A Practical Guide to the Management of the Teeth, Comprising a Discovery of Caries or Decay of the Teeth with its Prevention and Cure* (published in 1819). One can find a copy in the Rudolph Matas Medical Library at Tulane. Dental floss, however, was not commercially available until 1882, and it wasn't until 1898 that Johnson & Johnson received the first patent. Dr. Parmly died in Paris in 1859.

Emile Lamm, who moved to Louisiana from France in 1848, patented a number of improvements in techniques of gold dental fillings. But that wasn't Lamm's only invention. His most successful creation was "Lamm's Fireless Engine", which operated on the St. Charles Avenue streetcar line (after the days of mules and horses). This was the same street railroad that John Hampson worked for as chief engineer. Lamm's engine saw service in the 1870s and 1880s in New Orleans, and was also widely utilized on the street railways of Paris, France.



*"Locomotive sans foyer pour tramway" first put into service "par le docteur Emile Lamm sur les tramways de La Nouvelle-Orléans à Carrollton"*

Not all floss discoveries were good for the teeth. Only in New Orleans could a dentist invent something detrimental to sound dental hygiene, but universally popular. Perhaps this was a bizarre way to increase his business. Born in New Orleans on December 7, 1889, Josef Delarose Lascaux is one of three other men (Thomas Patton, John C. Wharton and William Morrison) who at different times are said to have invented the cotton candy machine. Cotton candy was first called *Fairy Floss*, and it is still called *candy floss* in England. Being fluffy and white, the French call it *barbe-à-papa* (grandpa's beard). Lascaux got a patent later than the other contenders (1921), but it wasn't until the 1920s that this centrifugal confection was called cotton candy. This name

seems to have much more of a New Orleans influence, and (for the U.S.A.) it is the one that stuck.



*Candy Floss vendor*

Before sugar could be spun, it had to be refined effectively. Étienne de Boré, a French planter and later first Mayor of New Orleans, owned a plantation making up what is the present-day Audubon Park. There in 1795 he successfully produced the first granulated sugar in Spanish Colonial America. Selling his 1796 crop for \$12,000, a new industry was born in Louisiana.

François-Gabriel "Valcour" Aimé was a Louisiana planter who first refined sugar directly from cane juice on site. His innovative methods employed at his plantation, the opulent *Le Petite Versailles* in Vacherie, Louisiana, gave him a competitive edge and earned him the title "father of white sugar." It also made him reputedly the richest man in the South.

Later, Norbert Rillieux, *quadroon libre* and first cousin of Edgar Degas' mother, was the man up to the challenge of making even greater improvements to the sugar industry. He was born in New Orleans March 16, 1806, the son of Vincent Rillieux, a wealthy white planter, and a black woman named Constance Vivant who had been his slave. Emancipated at birth by his father, he was educated at the finest schools in New Orleans and *L'École Centrale*, a prestigious engineering school in Paris. He was educated (as his father had been) to be an

engineer.



*Norbert Rillieux, who revolutionized the sugar industry with his pan method of processing sugar*

Norbert Rillieux became an accomplished chemical engineer, a teacher and an expert in applied mechanics who published numerous papers on steam technology. He returned to the United States in 1840 where he invented a steam-operated sugar refining process (patent No. 3,237) that increased efficiency tenfold. The previous method involved ladling boiling hot liquid sugar between kettles of different sizes. This wasteful and life threatening sugar-boiling process (known as the "Sugar Train", "Spanish Train" or "Jamaica Train") was streamlined by the use of a giant steam-driven vacuum chamber. Cane juices were piped from pan to pan, re-utilizing the steam and saving mechanical and human energy. Human lives would be saved. Sadly this invention required more slave labor than before, in much the same way that the cotton gin required more field laborers to provide more cotton to process.

After patenting his system, Norbert Rillieux successfully put his process into operation at Theodore Packwood's *Myrtle Grove* plantation. Soon afterward, the system was installed at *Bellechasse*, a plantation owned by Judah P. Benjamin, later Secretary of State for the Confederacy. Benjamin and Rillieux became very good friends.

Rillieux presented a plan to the city to combat yellow fever in New Orleans in the 1850s by eliminating the mosquitoes' moist breeding grounds by correcting problems in the city's sewer system and by draining area swamps. His ideas were not approved. Disenchanted with conditions and prejudice at home, Rillieux returned to France in 1854 and became headmaster of his old engineering school. In Europe he encountered another kind of prejudice, that of rigid technological thinking not easily open to change. He found a new interest in deciphering hieroglyphics, working with the famous Egyptologist, Jean-Francois Champollion.

Rillieux continued to work on improvements to his invention and, in his 70s, he perfected a new five-cycle evaporation process that is still in use today (in products as diverse as evaporated milk and soap, in sea water desalination and recycling on the space station). He died in Paris in 1894.

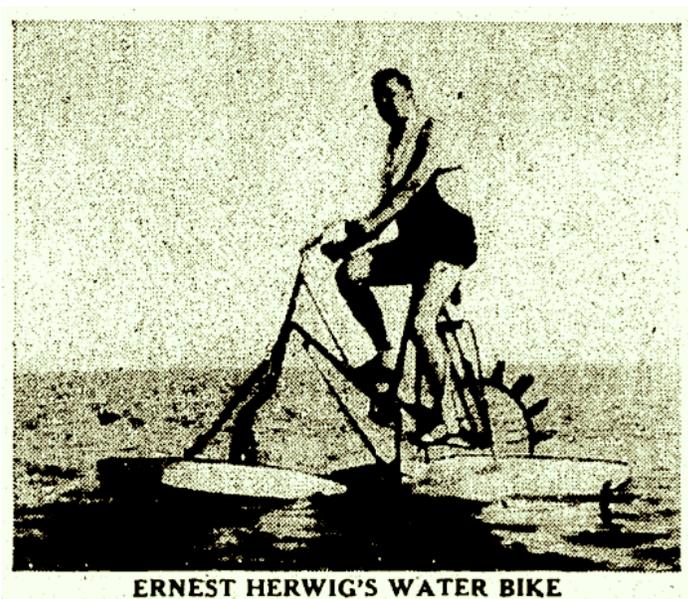
Besides sugar, cotton was extremely important to the economy of Louisiana. Rillieux's engineer father, Vincent Rillieux, had invented a steam-driven cotton press. While working at the U.S. Department of Agriculture (USDA) laboratories in New Orleans in the 1950s, New Orleans-born Ruth Benerito (nee Ruth Mary Rogan) became famous for inventing a process for making wrinkle-free cotton. Her work involved the use of mono-basic acid chlorides in cotton production, for which she obtained 55 patents, making possible more wrinkle-free and durable clothing. These innovations greatly reduced the amount of time required to iron clothing. By chemically treating the surface, she discovered the means of making cotton wrinkle-resistant, as well as creating other stain-and flame-resistant fabrics. Her work is said to have "saved the cotton industry".

Andrew Jackson Higgins (1886 – 1952) was the founder of Higgins Industries, the New Orleans-based manufacturer of the LCVPs (Landing Craft, Vehicle, Personnel), otherwise known as the "Higgins boats". Ike called him "the man who won the war for us". Eisenhower explained that in World War II, "If Higgins had not designed and built those LCVPs, we never could have landed over an open beach."



*FDR and Higgins at the City Park plant September 29, 1942*

Not all New Orleans watercraft were quite as successful as the "Higgins boats". Ernest Herwig of 5924 Magazine Street invented a water bike mounted on three pontoons. It was capable of going ten miles per hour in a calm sea. In March of 1941, with war on the horizon, the *Times Picayune* reported he was "busy rendering the pontoons bullet and bombproof for national defense purposes".



*Herwig on his water bike, Times Picayune, March 2, 1941*

Alden "Doc" Laborde, a Vinton, Louisiana, native who made New Orleans his home, served in World War II as the commander of three combat vessels in the Atlantic and Pacific theaters. As a young engineer, "Doc" believed that a mobile, submersible rig was a more efficient method for drilling oil offshore. After being turned down by several oil companies, Charles Murphy, Jr., invested \$500,000 in the new Ocean Drilling and Exploration Co. (ODECO). The first rig, named "Mr. Charlie," was a success, and "Doc" Laborde went on to found two other publicly traded companies serving the offshore oil and gas industry. After drilling hundreds of offshore wells for over 30 years, "Mr. Charlie" is now on permanent display at the International Petroleum Museum & Exposition in Morgan City.

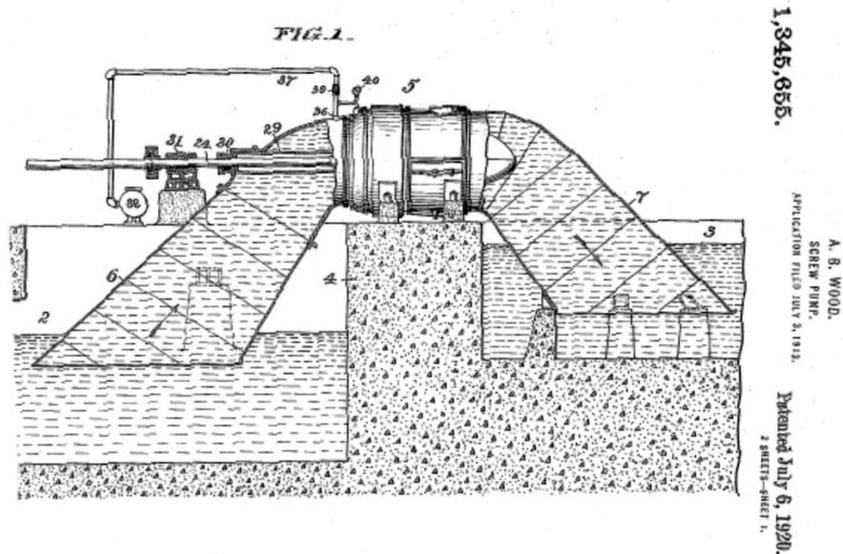
Donald C. Wetzel, born in the Crescent City and a graduate of Jesuit High School in New Orleans and Loyola University New Orleans, is the engineer holding the patent to the automatic teller machine (ATM). For three years after college, Don played professional minor league baseball before putting his bachelor's degree to work at IBM. He soon left IBM for Docutel, a company assisting in automated baggage handling. The year was 1968, and Don envisaged the ATM while in Dallas in a bank line. He called his device the *Docuteller* machine, and it entered production at New York City's Chemical Bank the following year. It was patented in 1973. Two other inventors are listed on the patent: Tom Barnes, chief mechanical engineer, and George Chastain, the electrical engineer. Today it is in worldwide use.

The only President of the United States to have held a patent is Abraham Lincoln, and it came about from his experience working on flatboats traveling down the Mississippi. The young Lincoln made two trips downriver to New Orleans, one in 1828 and the other in 1831. He became inspired to invent an air-chamber device that could free stranded river vessels by lifting them over sandbars. Lincoln took the scale model with him to Washington and hired attorney Z. C. Robbins to apply for the patent, and (on May 22, 1849) the future President of the United States received Patent No. 6469. Part of his application explained: "Be it known that I, Abraham Lincoln, of Springfield, ... have invented a new and improved manner of combining adjustable buoyant air chambers with a steam boat or other vessel for the purpose of enabling their draught of water to be readily lessened to enable them to pass over bars, or through shallow water, without discharging their cargoes..."



*Lincoln's scale model on display at the Smithsonian, an invention apparently never applied to any vessel*

There are so many other inventors and tinkerers that have spent valuable hours in New Orleans. These creations include Ernest Hansen's Sno-Bliz machine, Ed Bordes' termite traps, John Scurlock's inflatable bouncing fun house known as the "Space Walk", A. Baldwin Wood's "Wood Screw Pump," the "Lapeyre Stair" and many more. But those are stories for another time.



*Wood's Screw Pump*

New Orleans, as it has been shown, is clearly not just a city of revelry, Carnival and "Bon temps," but of long hours of scientific research and other imaginative endeavors. In the years following Hurricane Katrina, New Orleans has seen an influx of innovative young professionals and other entrepreneurs who view this city as a rich environment for inventive creativity.

Abraham Lincoln had this to say:

"Man is not the only animal who labors; but he is the only one who *improves* his workmanship," he remarked in 1858. The following year he praised the patent laws for having "secured to the inventor, for a limited time, the exclusive use of his invention; and thereby added the fuel of *interest* to the *fire* of genius, in the discovery and production of new and useful things."

## **NED HÉMARD**

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"Creative Crescent City"  
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